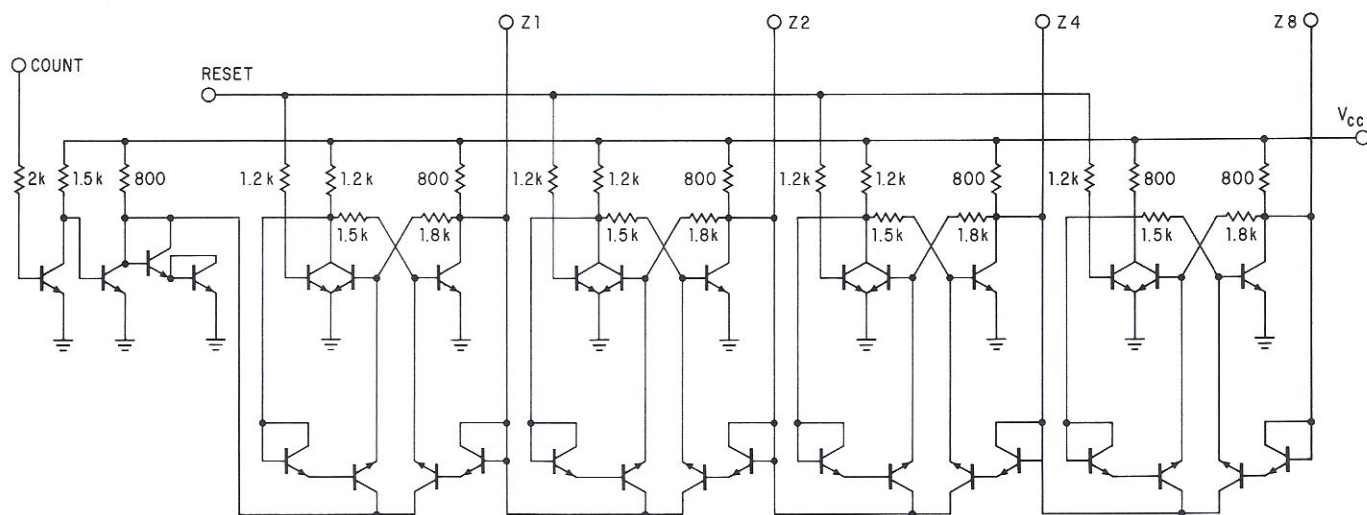


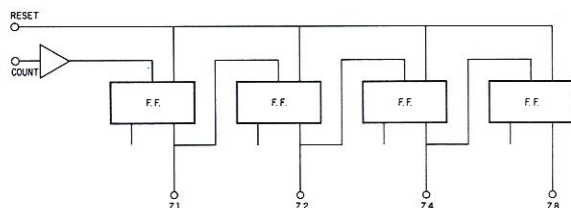
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FAIRCHILD COUNTING MICROLOGIC® INTEGRATED CIRCUITS C_μL9989

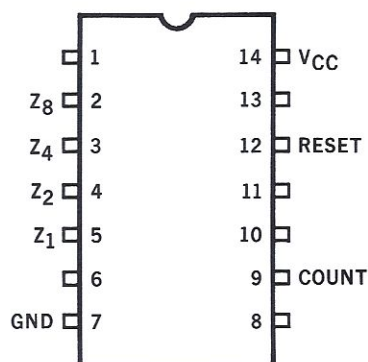
SCHEMATIC DIAGRAM



LOGIC DIAGRAM



14 PIN DUAL IN-LINE
CONNECTION DIAGRAM
(Top View)



TO-99 CONNECTION DIAGRAM
(Top View)

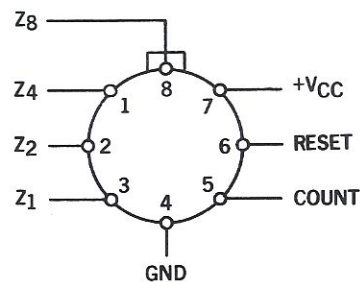
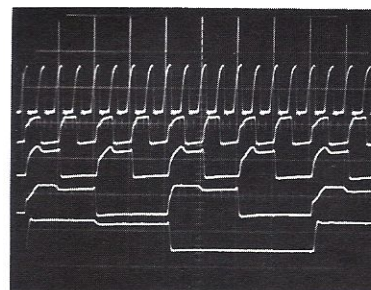


TABLE OF OUTPUT STATES

COUNT (H = High, L = Low)		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Z ₁		H	L	H	L	H	L	H	L	H	L	H	L	H	L	H	L
Z ₂		H	H	L	L	H	H	L	L	H	H	L	L	H	H	L	L
Z ₄		H	H	H	H	L	L	L	L	H	H	H	H	L	L	L	L
Z ₈		H	H	H	H	H	H	H	H	L	L	L	L	L	L	L	L

INPUT/OUTPUT WAVEFORM



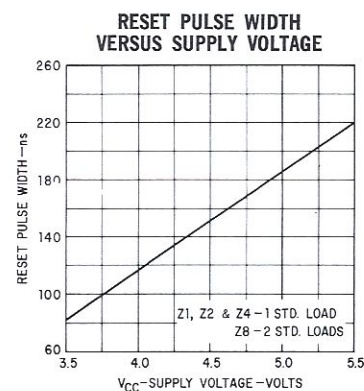
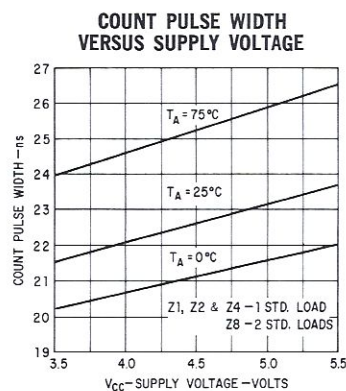
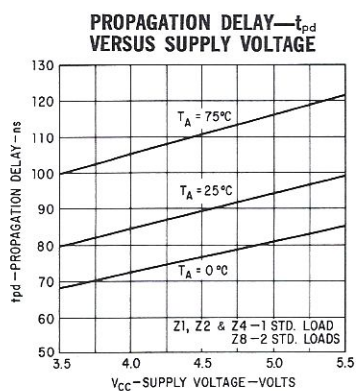
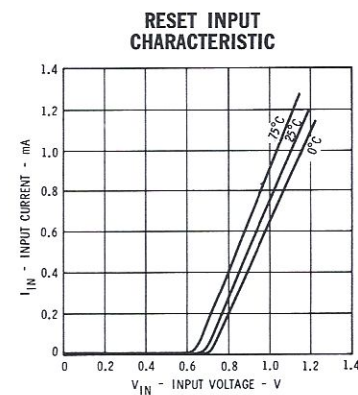
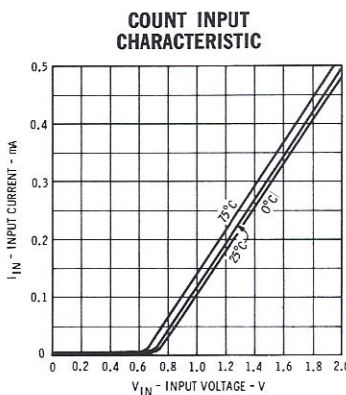
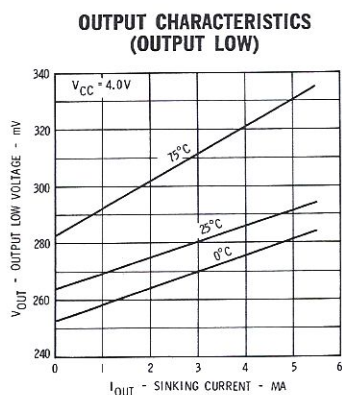
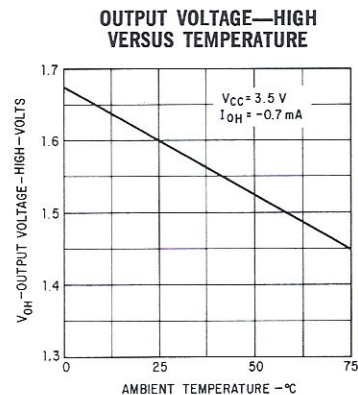
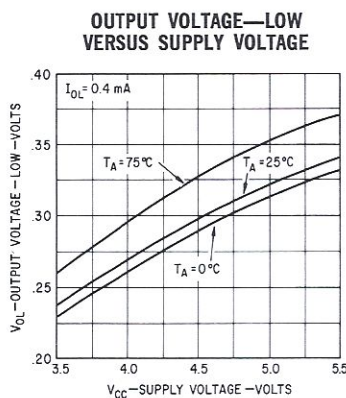
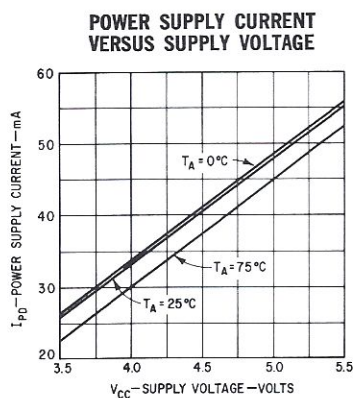
RESET/PRESET

The circuit is reset to count 0 (all outputs high) with a high level at the reset input pin.

To preset an arbitrary count:

1. Reset to count 0 and then return the reset pin to a low level.
2. Ground (below 0.45 V) the appropriate outputs.

TYPICAL ELECTRICAL CHARACTERISTICS

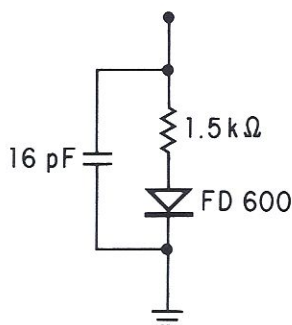


FAIRCHILD COUNTING MICROLOGIC® INTEGRATED CIRCUITS C μ L9989

LOADING RULES

DRIVING DEVICE	CAN DRIVE	AT V _{CC} RANGE OF
C μ L9989 Z ₁ , Z ₂ , Z ₄ Z ₈	Open 1 Standard Load	3.6 to 5.5 Volts
C μ L9989 Z ₁ , Z ₂ , Z ₄ Z ₈	1 Standard Load 2 Standard Loads	4.0 to 5.5 Volts
C μ L9989 Z ₁ , Z ₂ , Z ₄ Z ₈	2 Standard Loads 4 Standard Loads	5.0 to 5.5 Volts
Industrial Range Milliwatt RTL	1 C μ L9989 Count	3.6 to 3.96 Volts
Industrial Range RTL	6 C μ L9989 Count 1 C μ L9989 Reset	3.6 to 3.96 Volts
Industrial Range DTL 6K Family	1 C μ L9989 Count	4.5 to 5.5 Volts
Industrial Range DTL 2K Family	3 C μ L9989 Count 1 C μ L9989 Reset	4.5 to 5.5 Volts

One Standard Load, worst case, is defined for testing purposes as shown in the figure below.



The following are defined as One Standard Load:

C μ L9989 Count Input
C μ L9958 Count Input
C μ L9959 Data Input
C μ L9960 Data Input
LP-RTL GATE INPUT

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